# Reflections on Studying Prosody in Talk-in-Interaction\*

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KEY WORDS	ABSTRACT	
actions	Rather than focusing on conversation as one context among many in which	
conversation	to study prosody, this paper approaches prosody as one set of resources and practices among many by which participants interactively produce conver-	
prosody	sation and other talk-in-interaction. Three episodes of conversation are examined, each exemplifying a different order of organization in which	
	prosodic practices may be implicated. The first develops various lines of	
talk	evidence to show that pitch peaks may be deployed and understood as	
	projecting that a next syntactic possible completion is the designed end of	
turns	the turn. In the second, the initial turns in the opening of a telephone conver-	
	sation are examined as the site in which the participants work out the pitch	
level at which the conversation - or at least its first part - will be conducted, and thereby "negotiate"		

level at which the conversation—or at least its first part—will be conducted, and thereby "negotiate" the tenor of the conversation's launching. The third episode focuses on the central part which prosody can play in the constitution of the action which an utterance is implementing. The paper closes with some reflections on what is needed for students of conversation in dealing with prosody—focusing especially on the need for a relevant way of describing the mediating operations which take the prosody as (partial) input and yield the action (or other conversational feature) being accomplished as outcome.

#### INTRODUCTION

It is, I take it, a position now widely subscribed to that prosody is mobilized by various orders of organization — linguistic and other. Some of its resources are recruited by the workings of syntax and semantics. Other prosodic practices invite understanding by reference to pragmatic and discourse considerations. In the last several years, for example, turn-taking and turn-organizational functions of intonation have attracted heightened attention (Couper-Kuhlen & Selting, 1996), and this underscores the importance of the understanding we accord the term "conversation" in the title of this special issue —*Prosody and Conversation*.

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I understand this term to *contrast* with an increasing interest in recent years in "spoken language" or "spoken discourse," an interest which itself adumbrates contrasts with *written* discourse, with *imagined* or *invented* sentences, and so forth. But "spoken" language or discourse includes a variety of materials—elicited texts, pre-existing texts performed on demand, elicitation sessions with consultants, specially prepared sentences to be read for experimental purposes, interviews, and so forth—which share the feature that they are produced by the vocal apparatus and accordingly (can) become the carriers of prosody.

But if we are to understand prosody as a set of resources for speakers and hearers, and as practices for the deployment of these resources, then that deployment will need to be understood by reference to the activities which the participants are engaged in, and "speaking" per se may well *under*specify the character of these activities or undertakings.<sup>1</sup> The importance of the title of this special issue is its specification of "conversation" from among the range subsumed by "spoken interaction." And yet it seems possible that "conversation" (in the sense of a technically specifiable speech-exchange system distinct from interviews, therapy, etc.) may well turn out to *over*specify the domain of reference we are addressed to. For that reason the reflections which follow often refer not only to "conversation," but also to the larger domain "talk-in-interaction." Conversation is paramount, in my view, in the range of types of talk-in-interaction, as talk-in-interaction figures in the production and understanding of the talk is key to understanding how *prosody* figures in it.

And so I am addressing myself in the first instance to some of what students of *conver-sation* and of *talk-in-interaction* more generally need to be able to deal with in the domain of prosody (and may need well-measured technical help with), and I am dealing with the sorts of *constraints* that are relevant to their own work on prosody (and in the technical help on which they draw). But I hope thereby to contribute to the understanding of those whose primary preoccupation is with prosody per se by showing how the features of particular contexts in which a bit of talk occurs can properly constrain our understanding of its prosody.

Put another way: the theme "prosody and conversation" can accommodate two potentially distinct larger procecupations. One focuses on the investigation of prosody across a range of contexts, in this case featuring *conversation* as the context of interest. The other focuses on conversation as one (arguably the primordial) form of talk-in-interaction, and the variety of elements and practices which enter into its organization, in this case focusing

Among the ground rules observed in the early days of radio talk shows in the United States in the 1960's was one which prohibited reading. Callers were to engage the radio host in "spontaneous conversation," and not write out their message in advance and read it. It happened, however, on some occasions that a caller would be interrupted just a bit after starting to talk by the host's admonition, "no reading"; and, on occasion, an argument might ensue in which this admonition would be met by a disclaimer, "I'm not reading," to which the radio host might well reply with confident insistence, "yes, you are," an insistence generally found by audience members to be well warranted by the cadences of the caller's "speech" — by its prosody. "Conversation" or, more generally, "talk-in-interaction" is a recognizably distinct form (or collection of forms) of "speech" or "speaking" or "spoken discourse," with a distinctive set and range of contingencies to which its distinctive practices are adapted—and "reading" is the product of recognizably different practices than those.

on *prosody* as the featured element and set of practices. This paper takes the second tack and is addressed in the first instance to what students of conversation need to do in dealing with the domain of prosody and intonation, with the hope that familiarity with this agenda will be of benefit as well to those who are committed to the other preoccupation.

There are three topics concerning the treatment of prosody in interaction that I address in what follows, out of the many which would repay close attention. One is one way in which intonation figures in the organization of turns at talk and of turn-*taking*. A second is how prosody can be deployed for more diffuse yet describable aspects of interaction within analyzable units of sequence organization.<sup>2</sup> The third is how prosody figures in the *action* which some utterance may be understood to implement. I will be most concerned with the last of these, and with encouraging collective reflection on the approaches and cautions which students of talk-in-interaction and of prosody should entertain in taking up this promising, but historically problematic, area of inquiry.

# TURN ORGANIZATION AND TURN-TAKING

In a recently published paper, Ford and Thompson (1996) take up systematically some evidence on ways in which prosody figures in the shaping and recognition of the possible completion of turns-at-talk in conversation. If I may render one upshot of their paper in my own idiom, it might go something like this: If syntax can be taken to "nominate" a spate of talk as structurally a possibly complete turn (given its sequential position in the trajectory of action), intonation can second the nomination — or not.<sup>3</sup> Of course, seconding is still not electing; certain pragmatic and discourse-organizational properties will also ordinarily have to be realized for the talk to be actionably possibly complete. And, actually, the alternative to "seconding" is stronger than simply "not seconding"; so-called "nonfinal

<sup>&</sup>lt;sup>2</sup> Although the text is phrased to convey the view that the units of sequence organization are analyzable independent of prosody and supply a context for it, Goldberg (1976, 1978) showed over twenty years ago that prosodic practices can contribute to the very constitution of sequences as units of organization. Roughly, she showed that decreasing peak amplitude could mark some next turn as affiliated to the prior talk as a continuation of a same sequence; increased peak amplitude could mark it as *dis*affiliated from preceding talk and representing a new sequence start. The incorporation of prosody into conversation-analytic treatments of the organization of talk-in-interaction is not as new a development as might be thought.

<sup>&</sup>lt;sup>3</sup> My idiom here weighs syntax more heavily relative to prosody than the Ford and Thompson paper does. For Ford and Thompson they would be equi-valent at the least, and perhaps weighted to the side of prosody. My own inclination to treat syntax as (ordinarily) setting the parameters within which prosody is deployed and interpreted is influenced by the observation (Sacks, Schegloff, & Jefferson, 1974, pp. 720–722) that syntactic possible completions not realized in prosodically final contours are nevertheless not uncommonly the site of "mis-targetted" (i.e., immediately withdrawn) start-ups of next turns by interlocutors, whereas turn-final contours — such as full falls at positions in turn-constructional units which are not syntactically possibly complete do not apparently occasion such ill-placed turn starts. I understand this to betoken the relevance and efficacy of syntactic parsing by interlocutors even where not converged with prosody, but not the reverse. Still, the upshot of the discussion of this point in the 1974 paper was an appreciation of "…the partial character of the unit-types' description in syntactic terms." (ibid., 722)

intonation" may block from recognition by the interlocutor (as well as by the academic analyst) the status of some talk-so-far as *syntactically* possibly complete, even when the syntax itself supports that status.

In my own contribution to the same volume (Schegloff, 1996a, pp. 84–90), another bearing of intonation on turn organization and turn-*taking* organization is touched on. It seems that intonation enters not only into the constitution and determination of turn completion itself, but into its *projection* as well. For example, out of all the syntactically provided-for possible completions which a turn-constructional unit<sup>4</sup> in progress may come to, a speaker can regularly project by a pitch-peak<sup>5</sup> that it is the *next* possible completion at which the turn-unit or the turn has been designed to end. The registering of "turn-final intonation" *as* turn-final is thus prepared for by the prosody of the just-preceding talk.<sup>6</sup> Consider the stretch of talk taken from a telephone conversation between two young women from New York taped in the late 1960's and represented in Extract (1), with which I mean only to call attention to a few facets of this practice of pitch-peak deployment.<sup>7</sup> <Sound Segment TG1><sup>8</sup>

- <sup>6</sup> Not the pitch peak alone, of course, for other features including prosodic ones will characterize the transition space following the marking of its opening, if any. The theme that elements of turns, including their words, may have their effectiveness underwritten by other modalities of conduct such as gesture as well as prosody *just before* their delivery is suggested in Schegloff, 1984.
- <sup>7</sup> Transcription Conventions may be found in Appendix I. See especially 2,D which describes the use of underlining to mark stress.
- <sup>8</sup> Angle brackets surround references to sound segments, all of which are accessible via the links on my home page (http://www.sscnet.ucla.edu/soc/faculty/schegloff/prosody) in a format suitable for most platforms. Should this web page cease to be available, readers should contact me directly or search the California Digital Library (http://www.cdlib.org).

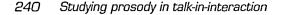
<sup>&</sup>lt;sup>4</sup> Compare Sacks, Schegloff, and Jefferson (1974, pp. 702–704). The term is meant to be self-explicating — the units out of which speakers set about constructing a turn at talk in conversation. By this term, "we meant to register that these units *can* constitute possibly complete turns; on their possible completion, transition to a next speaker becomes *relevant* (although not necessarily accomplished)." (Schegloff, 1996a, p. 55)

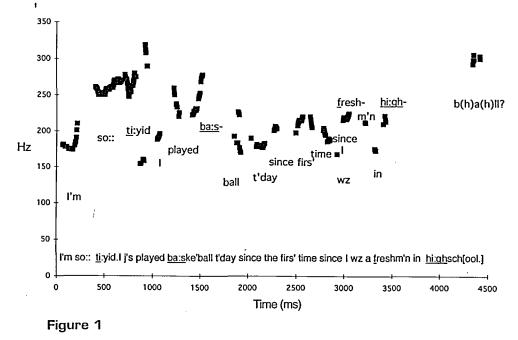
<sup>&</sup>lt;sup>5</sup> There are almost certainly many other aspects of an intonational trajectory to which interlocutors are oriented in projecting upcoming possible completion, although as far as 1 know, relatively little work has been done in this area working with real, naturally occurring conversation (but see, e.g., Local, Wells, & Sebba, 1985; Wells & Peppé, 1996; and especially Local, Kelly, & Wells, 1986, for work on British data and more general analytic considerations). As will become clear, I am not addressing myself here to the entire configuration of features which may signal and embody upcoming completion (features such as deceleration or "drawl," for example, or decreasing power/amplitude), but rather the initial indication of possible completion upcoming—what in turnorganizational terms would be understood as "the opening of the transition space" (Schegloff, 1996a, pp. 84–90, 96–97). Suggestions that a "step down" may do the same job in some dialects (Wells, p.c.; Payne & Wells, 1997) might recommend the broader term "pitch prominence," but the narrow range of my own research experience inclines me to stick with the pitch peaks observed in the data with which I have worked.

(1) TG, 2:10–27 1 Ava: I'm so :: ti:yid.I j's played ba:ske'ball t'day since the 2  $\rightarrow$  firs' time since I wz a freshm'n in <u>hi:ghsch[ool.]</u> 3 Bee:  $\rightarrow$ [Ba::]sk(h)et= 4 b(h)a(h)ll? (h)[(`Whe(h)re.) 5 Ava: [Yeah fuh like an hour enna ha:[1f.] 6 Bee: ['hh] Where 7 Bee:  $\rightarrow$  didju play <u>ba:</u>sk[etbaw. ] 8 Ava:  $\rightarrow$ [(The) gy]:m. Bee: 9 In the gy:m? [(hh) 10 Ava: [Yea:h. Like grou(h)p therapy. 11 (.) 12 Ava: Yuh know [half the grou]p thet we had la:s' term wz= 13 Bee: [O h ::: : . ] hh 14 Ava:  $\rightarrow$  = there- <'n we [jus' playing arou:nd. 15 Bee: [ hh Bee:  $\rightarrow$  Uh-<u>f</u>o[oling around. 16 17 ['hhh Ava: 18 Ava: Eh-yeah so, some a' the guys who were bedder y'know wen' 19 off by themselves so it wz two girls against this one guy 20 en he's ta:ll. Y'know? ['hh 21 Bee: [Mm hm? 22 Ava: En, I had- I wz- I couldn't stop laughin it wz the funniest 23 thing b't y'know you get all sweaty up'r en evrything we 24 didn" thing we were gonna pla:y, 'hh en oh I'm knocked out. 25 Bee: Nhhkhhhh! 'Hhhh

First, we should note that recipients may evidence their understanding that a pitch peak can project imminent completion by starting a next turn just after it, in anticipation of that completion. At lines 2–3 (at "hi:ghschool") <sound segments TG1aa, TG1ab>, at lines 7–8 (at "ba:sketball") <TG1ba, TG1bb>, and at lines 14–16 (at "playing arou:nd") <TG1ca>, a pitch peak's projection of upcoming designed completion is directly followed by a start of a next turn—so directly that in the first two instances it is in terminal overlap with the remaining syllables of the incipiently-ending turn. [In <TG1ab> and <TG1bb> the sound is momentarily stopped after the pitch peak and before the overlap onset to put into bolder relief the juxtaposition of interest here. A pitchtrack for lines 1–3 may be found in Figure 1.] Again, then: pitch peaks can project imminent designed completion, and can be so understood and acted upon by their recipients.

Second, we should note that in instances in which the turn-constructional unit will continue past a syntactically possible completion, or in which the turn is meant to continue past the possible end of a turn-constructional unit (Sacks, Schegloff, & Jefferson, 1974;





Pitchtrack for TG2: 10-27, 1-2

Schegloff, 1982, 1996a; see also Auer, 1996), there may be no pitch peak where one might have been expected. For example, at line 19 one could plausibly expect a pitch peak on the second part of "themselves," and again on a more inflected realization of the word "guy."<sup>9</sup> But neither of these unit completions is being designed as turn completion, and one way of designing them not to be turn-terminal is to withhold (or even suppress) projecting upcoming completion with a pitch peak, however much the structure of the unit as a clause or sentence might invite such an intonational realization. [<TG1da> presents the turn through "themselves"; <TG1db> presents it through "guy." ] No upcoming turn completion, no pitch peak. [<TG1dc> presents the turn through "tall" with its pitch peak, and the consequent end of the turn-constructional unit and response by recipient.] We see here, I might point out, one of the ways in which grammar can register the position of its units within the organization of a turn (Schegloff, 1996a, pp. 61–69)—here, marking sentences prosodically as possibly final components, or not possibly final.

A third observation: Some pitch peaks which occur just before turn completion and turn transfer will seem to some analysts to have been produced by reference to syntactic or semantic considerations, or in order to emphasize or intensify some element of the utterance, and not by reference to turn-taking organization at all. But then we should consider the possibility that the semantics and syntax of the utterance may have been so arranged in the design of the turn that the pitch peaks which they mandate or invite will be compatible

<sup>&</sup>lt;sup>9</sup> "Plausibility" is, of course, not analysis, but part of vernacular knowledge *requiring* explication and analysis, an analysis here being proposed to be grounded in the claimed use of pitch peaks to project upcoming possible completion.

with (or even identical with) the use of those pitch peaks to project next possible completion as the designed completion. It has, after all, been proposed that other things are designed to come at the end of turn-constructional units — whether so-called "new information," or disagreement-implementing modifications and exceptions to prior talk by another (Sacks, 1987, p. 62), or problematic utterance components which require a search (Sacks, 1992, Vol. I, p. 321), or delicate ones which can be left for recipients possibly to voice (Lerner, 1991, 1996). (Indeed, might the asserted association of "new information" with placement late in the turn be grounded in this double-duty import of prosody?)

But if a pitch peak has been deployed for emphasis or intensification or some other use (e.g., so-called "information focus"), but occurs on a carrier whose syntactic properties and placement can have it be heard as projecting upcoming completion, then speakers may at that point initiate a rush-through (Schegloff, 1982)<sup>10</sup> or other preemptive move into the start of a new turn unit—or into an extension of the prior one—to block the next turn start by another which they can hear themselves to have analyzably occasioned. Something like this seems to be relevant in Extract (1) at line 1 < TG1e > ("...ti:yid.I j's played...") or at line 14 < TG1f > ("half the group thet we had la:s' term wz there- <'n we jus'..."). In both of these, the pitch-peak is followed at the next possible completion by practices of talk production designed to interdict (literally) the anticipatable start-up of a next turn by the coparticipant. Indeed, at a later occurrence on line 1 < TG1ga>, the effort to preempt a next turn start by the interlocutor after a pitch peak seems to precipitate a mis-speaking in "ba:ske'ball t'day since the firs' time since I wz a freshm'n in hi:ghschool." Here, the first "since"—which is the locus of preemptive continuation after the pitch peak on "ba:ske'ball" — is an anticipation of the second "since," and likely has mistakenly replaced "for."

Such pitch peaks, then, can have structural import and consequences for turn distribution and for its management not wholly determined by their speaker's "intentions," import which can constrain the speaker's own ensuing conduct. That is part of what I mean by relating prosody to turn-organization and turn-taking organization. As a by-product, however, such pitch peaks can be taken to reveal aspects of the speaker's design—or "planning"—of the utterance as well, and thereby appear to provide an interactionally-grounded window into so-called "intentionality."

For example, it is by reference to such prosodic design features of turn-constructionalunits that hearers (whether coparticipant or research-oriented) can "hear" that some elements at the end of a turn were added on as "afterthoughts," and were not part of the TCU as projected, or alternatively that they were designed into the turn from the outset. For example, elsewhere in the conversation between Ava and Bee, there is an exchange about teachers they have both "had," which begins in Extract (2)  $\langle TG2 \rangle$ . (See Figure 2.)

<sup>&</sup>lt;sup>10</sup> In a "rush-through" a speaker who is approaching upcoming possible turn completion increases the pace of the talk, does not decelerate, talks through the momentary silence which regularly intervenes between the end of a turn and the start of a next, and launches a next turn-constructional unit, often stopping a bit into that new unit at a point of "maximum grammatical control," for example, after a preposition but before the remainder of its phrase.

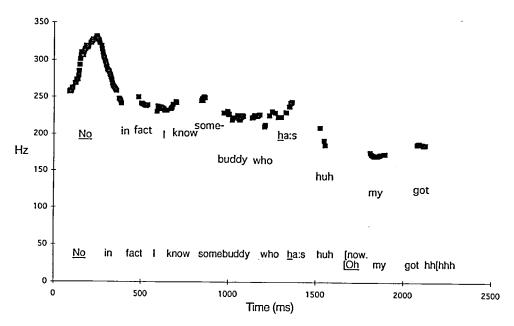


Figure 2

Pitchtrack for PG4: 35-5:3,5-6

(2) TG 4:35-5:3

1	Bee:	Eh-yih have anybuddy: thet uh:? (1.2) I would know from the
2		English depar'mint there?
3	Ava:	Mm-mh. Tch! I don't think so.
4	Bee:	Oh,= <did geh="" hhh<="" kuhleznik="" ridda="" td="" they="" yet=""></did>
5	Ava: →	No in fact I know somebuddy who ha:s huh [now.
6	Bee: $\rightarrow$	[ <u>Oh</u> my got hh[hhh
7	Ava:	[ <u>Yeh</u>
+1	a nitah na	alt on "hous" (ling 5) <tc2aa> projects next needible completion o</tc2aa>

Here, the pitch peak on "<u>hass</u>" (line 5) <TG2aa> projects next possible completion as the designed turn end, and that comes at "huh" (i.e., "her" in the New York dialect being spoken here), and that is where Bee begins a next turn, overlapping the remaining word of Ava's turn, "now" <TG2ab> (the sound segment inserts a brief delay before "now"). Consider, however, this same utterance with the phrase "for Shakespeare" as part of it. Then, if the pitch peak were placed at the same "<u>hass</u>," "for Shakespeare" might well be heard as an afterthought—as not originally a part of the turn's design—indeed, as "coming up" after the "<u>hass</u>." ("No in fact I know somebuddy who has huh now. For Shakespeare" as a designed part of it from the beginning would very likely have its pitch peak on the first syllable of "Shakespeare," like this: "No in fact I know somebuddy who has huh now for Sh^a:kespeare." If there is any merit in this conjecture, then it invites us to recognize that the psychologistic attribution of speaker "intention" for an utterance and "afterthoughts" as post hoc additions is at least partially prosodically prompted and grounded.

The preceding discussion is meant to provide a prima facie case that a pitch peak can serve to project upcoming possible completion by reference to (a) the observable recurrency of the practice's deployment by speakers, (b) the apparent understanding of some pitch peaks along these lines by interlocutors made manifest by responsive action grounded in this understanding, and (c) an orientation by speakers to the possibility that interlocutors may understand their talk this way and action on their part which is grounded in this orientation (i.e., preemptive blocking of anticipated next speaker start-up). They do it; they are understood to have done it; they take it that they will have been understood by interlocutors to have done it.

The occurrence of instances in which pitch peaks are *not* followed by possible completions is not ipso facto disproof; we know that pitch peaks are used in other ways as well. And there are surely other resources, including prosodic ones (e.g., deceleration) which serve to project the possibility of imminent possible completion. Because pitch peaks are components of complex configurations of practices implementing multiple levels of organization at the same time, and are deployed by speakers and grasped by recipients by reference to each single case's configuration, such efforts at quantitative analysis as may be undertaken in this area require exceptional care and interpretive acumen (for some detailed caveats, cf. Schegloff, 1993; 1996c, pp. 22–30). One direction of inquiry worth pursuing concerns when this practice is used, what it does as compared to other practices for projecting imminent possible completion, and what about pitch peaks suits them to do this job.

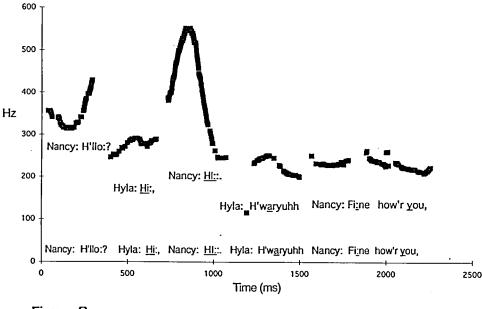
The deployment of pitch peak discussed in this section is, of course, but one bearing of prosody on turn production and turn-taking organization.

## EPISODIC INTERACTIONAL USES OF PROSODY

Of course, prosody also gets mobilized for quite different jobs than turn-taking ones; for example, for the display of stance, mood, uptake, or reaction, and the like. And where these are especially, recurrently, and interactionally critical, we may find the demands of *other* orders of organization on prosody to be mitigated on their behalf.

For example, openings of conversations are interactional moments in which the current state of the relationship between the participants relative to its state at last contact (if any) is initially worked through, on each occasion of interaction. Here, as well, parties in effect work through such issues as their respective identities (whether familiar or not), their respective current states, moods, and so forth and arrive at some order in which their concerns will get mentioned and taken up. In these ways and others, a tenor is calibrated for at least the start of the interaction. When the interaction is on the telephone, and the parties are without visual access to the face, posture, demeanor, clothing display, and the like of the other for personal identification, mood assessment, and so forth, the resources of the voice may assume a heightened role in the interaction (Schegloff, 1968, 1979, 1986).

Note, then, that openings — especially on the telephone — are regularly composed of a stretch of very short turns, largely of simple and highly recurrent syntactic form mostly single words and interrogative clauses so routinized as to in effect be treated as "frozen" or even lexicalized, such as "Howareyou." Such turns free the resources of prosody



#### Figure 3

Pitchtrack for HGII, 1:01-17, 1-6

from deployment occasioned by the constraints of syntax and from interpretation by reference to syntactic and semantic considerations, and make it available for subtly shaded displays of state and stance, of mood and relationship, of topic priorities and topical allusion, of sequence organization and interactional exigency.<sup>11</sup> They free the hearing and understanding of the talk by its recipients to bring a finer-grained discrimination, and a refined and different interpretive grid, to bear on its uptake. Consider, for example, Extract (3) <HG1>, featuring two young women from Los Angeles in the mid-1970's and Figure 3.

<sup>11</sup> For example, the "howareyou" question is almost always realized in one of two configurations of accent: "Howareyou" and "Howareyou." The "Howareyou" realization is deployed to mark "special occasion" — as in marking a long time since last contact, or a first contact since some major (often problematic) event. Otherwise, it is used to bring off the inquiry as the *first* in an exchange of such inquiry sequences, even if there has already been such an inquiry by interlocutor; it is, that is, specialized for "first in an exchange of inquiries or inquiry sequences." "Howareyou," on the other hand, can be used to initiate both the initial and the reciprocal inquiry sequence. There is not the space here to provide the evidence for these claims (except for how they figure in the data extract taken up in this section, but see Schegloff, 1986, p. 130); I mean them only to exemplify part of what I mean by the observations in the text, and to register that sequence organization can be relevant to the prosody of talk-in-interaction, as can the turn and turn-taking organization discussed in the previous section and the overall structural organization discussed in this one. Prosody can figure dramatically in another way in these "Howareyou" sequences. If a lexically unmarked or "upbeat" response (e.g., "fine" or "wonderful") is delivered in a prosodically "downbeat" fashion, it is the prosody which ordinarily weighs most heavily in shaping its uptake as a negative response and engenders the sequential consequence (ibid.) — a pursuit along the lines of "what happened" (Sacks, 1975).

(3) HG II, 1:0	l–17
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1		((ring))
2	Nancy:	H'llo:?
3	Hyla:	<u>Hi</u> :,
4	Nancy:	<u>HI:</u> :.
5	Hyla:	Hw <u>a</u> ryuhh=
6	Nancy:	=Fi <u>:</u> ne how'r <u>y</u> ou,
7	Hyla:	Oka <u>:</u> [y,
8	Nancy:	[Goo:d,
9		(0.4)
10	Hyla:	`mkhhh[hhh
11	Nancy:	[What's doin,
12		(•)
13	Hyla:	<u>Ah:</u> , noth[i : n : ,]
14	Nancy:	[Y'didn't g]o meet Gr <u>a</u> hame?=
15	Hyla:	`pt`hhhhhahh <u>W</u> ell, I g <u>ot ho</u> ::me,=
16	Nancy:	=u-hu <u>:h</u> ?
17		(•)

This brief stretch of apparently routinized and prescripted talk is full of the organizational and interactional issues which I just mentioned, which are virtually inescapable in interactional openings (cf. Schegloff, 1986). This is not the place to detail how this range of matters is embodied in these extraordinarily compacted utterances. But let me call attention to just one aspect of this opening in particular in which prosody figures centrally, and through which the setting of one aspect of the initial tenor for the interaction is arrived at.

At line 04 <HG1a>, after Nancy's first exposure to a voice sample (Hyla's "Hi") which allows her to recognize the caller, Nancy claims such recognition with her return greeting, and displays the stance she is taking toward the interaction being launched here through the "enthusiasm" of her prosody, not least through the pitch setting which she employs. It is not just that it is a high pitch setting, but that it is hearably high-within-her-range. It seems to be a practice designed to "do" "really pleased to hear from you."<sup>12</sup> Note, then, that Hyla's

<sup>&</sup>lt;sup>12</sup> Note that talking in this position is not symmetrically distributed between the participants. Hyla has called Nancy, is presumed to know whom she has called, and is oriented to hearing a familiar voice when the phone is answered. Although a highly animated greeting by caller when the phone is answered may be deployed after a long interval between contacts or after a major (ordinarily favorable) occurrence in the answerer's circumstances, it would otherwise be odd for a caller to display "pleased surprise." (It might be followed by an account that she had dialed the wrong number and had been unprepared for the answerer whom she in fact reached.) For the answerer, however, the trajectory of information development is quite different; at the ring, she does not ordinarily know the identity of the incipient interlocutor and must glean it either from voice recognition or from the caller's self-identification (Schegloff, 1968, 1979). So the prosody here is, in part, deployed by reference to the parties respective standing as "caller" or "called," categories in the overall structural organization of the unit "a single conversation."

next turn <HG1b>, initiating a new component sequence of the opening (the exchange of "howareyou"s), is in markedly lower pitch register, shows (if you will) markedly more restraint. Again, it is not just that it is lower than Nancy's; it is hearably lower-in-Hyla's-pitch-range than Nancy's was in her pitch range. The two young women have thus taken up different stances toward the occasion-so-far, and toward what the occasion is to be made into.

Although the term "negotiation" is often abused in studies of interaction, it seems apt to characterize what is underway here as a negotiation over the pitch level at which this conversation is to be conducted, at least initially, and whatever is potentially linked to that pitch level, such as affective tenor. At issue may be not only the pitch level of the talk, but also whether they will converge on one pitch level, or sustain different ones. The two initial positions have been staked out; Nancy's response to Hyla's "Howarya" <HG1c> will constitute the next stage in this trajectory-her "response" to Hyla's markedly divergent pitch. She could answer within her previous high-pitched range; she could drop to her equivalent of Hyla's level-within-range; she could drop in the direction of Hyla's level without reaching it and thereby aligning with it, and who knows what else. (Could she, for example, go higher still than her previous level?) What happens is <HG1d>—that she drops to Hyla's level, or rather to her own equivalent-within-range. Thus is an initially divergent interactional alignment toward the incipient conversation resolved into a convergence <HG1e>, all carried through in the prosodic realization of the talk. Once attuned to this level of the exchange, we should register as well that Hyla's pitch setting for the "Hwaryuhh" <HG1c> itself embodies a stance. That stance is not to rise to Nancy's pitch level in the prior turn, but to stay at the one she (Hyla) had set in her prior (and first) turn, and Nancy's turn in response at line 6 thus follows a move to divergence.

This then is another way (in addition to ways implicated in turn organization) in which prosody may figure in talk-in-interaction, a way which serious interactional analysis must be able to reach, address, and incorporate into an adequate understanding of the organization of conversation generally, and of specific stretches of talk in particular, and by which a proper prosodic analysis will be informed as well. Because the carriers of prosody are virtually always in a turn, prosody is as well. But we have here a prime example of a feature of talk-in-interaction which may be "in a turn, but not of it" (cf. Schegloff, 1996a, pp. 69-73). By that phrase I mean, in the present context, to be registering the following observation(s). Nancy's "Hi," not only is in a turn, it exhaustively composes one! Yet its prosody is not to be understood primarily by reference to the turn and the turn-constructional unit which it (the "Hi!") constitutes. As noted earlier (Footnote 12), the turns at lines 3 and 4, although identical in their composition as turns, are sharply different in their position within a sequence and within the developing course of the interactional episode as a whole. The intonation of Nancy's turn is not in the first instance produced or understood by reference to its place in its turn. Rather, it is about, and is to be understood by reference to, the encounter and the relationship whose next moments the encounter will embody within the overall structural organization of the conversation and its occasion, and how the actions being implemented in the opening sequences ("greeting" and "recognizing" etc.,) figure in the encounter, the structural position of the parties in it (as "caller" and "called," for example), and the relationship to be lived out in it. These inform the deployment and import of the prosody in this context quite as much as syntax and semantics may do in other contexts.

## PROSODY AND THE PRACTICES OF ACTION FORMATION

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A third line of inquiry, one worthy of special attention here, is the bearing of prosody on the accomplishment of action, for one of the most intuitively inviting prospects in incorporating prosody in the study of interaction has often been that it is the intonation of some utterance which has it "do" some action or produce some outcome. Often such a proposal prompts a responsive resonance in its audience, whose members think—or feel—"Yes that's right; it's the up/down contour, or the shift to ultrahigh pitch, or the accelerated pace, or the recession to creaky voice, and so forth which makes that sound angry, or makes it 'do anger'." But should someone withhold assent, it is not clear what resources are available to deal.with the nay-sayer. Without some analytic basis for the claim, there is nothing to do but say, "listen again," or dismiss the obstructionist as insensitive... or as tone deaf.

Some readers may wish to invoke a body of work in experimentally controlled settings as the basis for such claims, but this tack appears problematic. The relevance of such work to naturally-occurring talk-in-interaction — where real interests, investments, interactional trajectories and so forth are at stake and serve as formative context-is at best unestablished, and is surely worthy of scrutiny and even skepticism.<sup>13</sup> If talk-in-interaction is the primary natural ecological niche for prosody as an element of natural language, we should expect it to derive its basic organization and deployment from its incorporation into usage in interaction. "Interactional effects" or "interactional import" are not added late to prosody already shaped by other "factors," so that it can first be studied in the laboratory without its natural interactional environment (any more than this is a feasible policy with respect to "speech acts"; cf. Schegloff, 1992c, p. 125). It seems apt, if not indeed critical, for students of talk-in-interaction that the most basic terms adopted for the analysis of prosody be ones which attend and formulate prosody in terms relevant and indigenous to the domain in which it is naturally situated and in which it will be studied, which is, in any case, arguably its home domain (and cf. Schegloff, 1996c, pp. 22-30). It is only after the independent grounding of claims about the deployment and uptake of prosody in naturalistic materials that we will be able to assess the standing and bearing of the findings of experimentally manipulated and controlled inquiry. To use the latter to ground the former leaves the entire enterprise equivocal.

There are really serious issues here. Without some analytic grounding of the claim that some prosodic feature accomplishes some action or contributes to it, we have no analysis of the methodicity of the practice by which talking in that way produces that outcome for the recipient in the interaction being examined. Unless one is claiming some kind of simple associationism (biologically hard-wired or based in convention) between intonation and action, we must suppose that there is some "methodic way" — some mechanism — by which some prosodic practice (not some particular prosodic realization) enters into the constitution and recognition of an utterance as an instance of some type of action, and that "way" — that mechanism — calls for analysis and explication (Schegloff, 1996b, 1997).

<sup>&</sup>lt;sup>13</sup> For a juxtaposition of experimentally controlled and naturalistic data on the same phenomenon compare, for example, Yaeger-Dror, 1985, where it is shown that the experimental results diverge dramatically and problematically from the naturalistic ones.

Rather than proceeding abstractly, let me offer a case in point, and then reflect on its import for our current analytic practice. Here is a bit of an analysis, turning on an aspect of prosody, an analysis which is now over twenty years old.

# A prosodically constituted compliment and its rejection

In this telephone conversation, recorded in Los Angeles about 1974 between the same Hyla and Nancy you have already met, two young college women who are close friends, Hyla is telling Nancy about a friend of hers from Minneapolis who is trying to arrange for an eligible young man who is coming to Los Angeles to get in touch with her (Hyla). Nancy and Hyla entertain together <HG2> the scenario that might develop if he asks her out (or "when he asks her out"; as Hyla remarks just before this exchange: "he doesn' have too much've a choi(h)oice"):

## (4) HG II, 13:37-14:25

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01	Nancy:	Well $\underline{w}$ t's (·) wt's he $\underline{li}$ : [ke.		
02	Hyla:	['hhhhhhh a-ah: she <u>s</u> ays ( $\cdot$ ) he y'know,		
03		th'las'time she saw im which wz (·) three years ago he wz pretty		
04		*good look*i[ng,		
05	Nancy:	[ <u>U</u> h hu <u>[:</u> h,		
06	Hyla:	['t'hhh		
07		(•)		
08	Hyla:	A:nd u <u>:</u> m,		
09		(1.0)		
10	Hyla:	't k you know she says eez a veewy nice guy.eez a rea:1, (0.7)		
11		't good <u>p</u> ers'[n.		
12	Nancy:	[Ri:ght.=		
13	Hyla:	=`t`hhh		
14		(0.7)		
15	Hyla:	A:nd, yihknow s[0,		
16	Nancy:	[That sounds <u>goo</u> :d.		
17		(0.2)		
18	Hyla:	<u>Eh:</u> ::,=		
19	Nancy:	$=A'\underline{r}i::[ght,$		
20	Hyla:	[Gimm[e sumpn [tih do [one night]		
21	Nancy:	[Y e : h [except [then yu'll] like him en hill go $\leftarrow$ a		
22		back [tuh Minnea]p'lis. =		
23	Hyla:	[ <u>h</u> hhh <u>h</u> hbhh]		
24	Hyla:	= 'eh En ah'll ne(h)ver hear fr'm $\underline{him}$ a[gai:n, ] $\leftarrow b$		
25	Nancy:	[nihh hnh] -heh		
26	( ):	·e-=		
27	Nancy:	=`hihh [hhhh		

28	Hyla:	[`hihhhhh	ı [ <u>hhh</u>	<u>h]</u>
29	Nancy:		[(	][ )didju get] th'mail [t'da : ] y?]
30	Hyla:			[It's a c' <u>ns]_p_i_r</u> [a c y] ag] <u>ai (</u> hh) ns
31		m(h)e,		

When I encountered the exchange in Extract (4), it struck me that, even though there was no readily recognizable compliment implemented by the diction of the turn at lines 21-22 (put most roughly, there is no positive assessment of the addressee), complimenting was somehow going on. And, although there was no rejection in the diction of line 24 — indeed it was built as a putative collaborative extension of the narrative line of Nancy's prior turn, a sad and tragic tale of frustrated romance — somehow the compliment of lines 21-22 was being rejected (on compliments and their uptake, cf. Pomerantz, 1978). You may well ask, "how so?" As did I. Here is a try — a try, it turns out, at developing an account of how practices of prosody may contribute to a turn being analyzable as a "possible compliment," and its reception as a "possible compliment rejection."

*The Compliment.* As I understand it, the natural placement of primary or "nuclear" stress in Nancy's turn-constructional unit following the "Ye:h" at arrow "a" <HG2a> would be on the verb "like" ("Yeah, except then you'll <u>like</u> him and…"), at least for the pragmatics of the point being made (See Figure 4). The point is that a date which begins as a casual "something to do one night" (as Hyla puts it at line 20) can end up with an emotional attachment, one here doomed from the outset by the fellow's need to return home — an American teen-aged version of Greek tragedy. The plot twist here — the dramatic tension, if you will — is between on the one hand "somethin to do one night" (line 20) and "liking him"; and on the other, between her "liking him" and his commitment (instead of to her) to "go back to Minneapolis." And the second of those stresses is indeed on "Minneapolis." But the first is not on "like," though it figures in both of the contrasts whose irony provides the armature for the projected story line, and the project which it is implementing.

Instead, that stress is displaced one beat and one word "to the right," so to speak, and falls on "him" ("Yeah, except then you'll like <u>h</u>im and…"). The stress invokes a connection, a pairing, with something else, whether contrasting or otherwise related.<sup>14</sup> It appears to be the second part of the pairing, the first part of which has, as we say vernacularly, gone unspoken—indeed, can go unspoken, and that is, that he will like her. And there is the possible compliment: in such a meeting, it goes without saying that he will like you; the question is, what if you like him? And this (possibly) complimenting outcome is accomplished by positioning the primary stress in a way which brings a different discursive and sequential relationship into view than would otherwise feature in this bit of fantasizing.

It may be useful to clarify the usage here, as in some other conversation-analytic writing, of the term or format "possible X," or, as in the text above, "possible compliment" and "possibly complimenting." (What follows is taken from Schegloff, 1996a, pp. 116–117, n.8.)

<sup>&</sup>lt;sup>14</sup> In providing for a "connection" between some unit in which the stress occurs (or, more precisely, some order of unit—the sound, syllable, word, phrase, turn, story, character-in-story, project, activity, which itself needs to be determined) and some other such unit—either prior or projected, this practice invites inclusion in what Sacks referred to as "tying techniques" (1992, Vol. I, pp. 150–155, 716–723, 730–737, et passim).

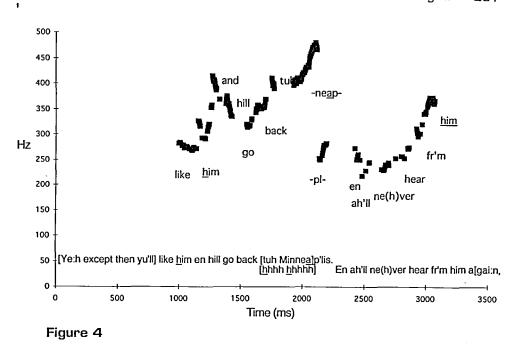
The usage is not meant as a token of analytic uncertainty or hedging. Its analytic locus is not in the first instance the world of the author and reader, but the world of the parties to the interaction. To describe some utterance, for example, as "a possible invitation" (Sacks, 1992:I:300-302; Schegloff, 1992a:xxvi-xxvii) or "a possible complaint" (Schegloff, 1988:120-122) is to claim that there is a describable practice of talk-in-interaction which is usable to do recognizable invitations or complaints (a claim which can be documented by exemplars of exchanges in which such utterances were so recognized by their recipients), and that the utterance now being described can be understood to have been produced by such a practice, and is thus analyzable as an invitation or as a complaint. This claim is made, and can be defended, independent of whether the actual recipient on this occasion has treated it as an invitation or not, and independent of whether the speaker can be shown to have produced it for recognition as such on this occasion. Such an analytic stance is required to provide resources for accounts of "failures" to recognize an utterance as an invitation or complaint, for in order to claim that a recipient failed to recognize it as such or respond to it as such, one must be able to show that it was recognizable as such, that is, that it was "a possible X" -for the participants (Schegloff, 1995, 1996c). The analyst's treatment of an utterance as "a possible X" is then grounded in a claim about its having such a status for the participants...

Here I am trying to develop an initial account of the practice that allows the utterance being examined to be recognizable as a "possible compliment."

Again, then, and a bit more explicitly: The prosodic feature is stress, more specifically, primary or nuclear stress, and stress positioned differently than its prima facie locus. Such stress—especially if displaced from its grammatically unmarked "home," sets its carrier talk into relationship with something else, and invites a search for what it locates as the other part of the "pairing."<sup>15</sup> The operation which the stress here seems to invoke, the type of relationship with the something else, is complementarity or reciprocity. And the relationship here is with something which has not been spoken, but which has been constituted as an element of the talk—as an alluded-to element which can be taken for granted—by the articulation of that which relates to it.<sup>16</sup>

<sup>&</sup>lt;sup>15</sup> There is very likely a reflexive relationship between the determination of what the target of the connection is and what the relationship with the target is, each being used to help determine the other in a cyclical manner. On the operation of a possibly similar multistage and reflexive practice in the domain of person reference, compare Schegloff (1996d, pp. 451–453); in the domain of repair, compare Schegloff (1992b, pp. 1326–1334). The possibility that the connection is to something that was left unspoken and is to be reconstructed does not arise in these other domains.

<sup>&</sup>lt;sup>16</sup> The claim here is different from more familiar claims about "zero realization." It is that there are practices executed or implemented in the talk whose effect is to invoke by sequential operation the relevance of something else which was not in fact articulated. This "tacitness" or "ellipsis" is furnished not by an analyst's theorized stipulation of the presence of something in an utterance which has no analyzable representation and which is then treated as "realized by a null." The claim rather is that a speaker employs practices of talk (*with* a surface realization) in a way which poses for the recipient a problem for analysis, a puzzle whose analysis requires reference to a determinate element, whose presence is thereby introduced as a tacit, that is, unspoken, element of the utterance. But this needs to be made explicit at every step of the way. So, as in the specimen being analyzed here, when an intonational practice serves to introduce a relationship of "contrast" into the talk, it can turn out that what follows is found to contrast not with something which preceded articulately, but is used to construct a putative earlier tacit element with which it reflexively contrasts.



Pitchtrack for HGII, 13:37-14:25, 21-24

*The Rejection.* And what about the possible rejection of the (possible) compliment? The primary stress in Hyla's turn appears to be displaced as well, from "hear" to "him" (not "I'll never hear from him again," but "I'll never hear from him again" < HG2b>). The pitchtrack appears in Figure 4.

Again, a placement of the primary stress on "hear" would be, it seems to me, not only grammatically unmarked; it would implement the virtual story line which Nancy has launched and Hyla appears to be collaboratively completing, for it would complement the unmarked placement of stress on "like," and juxtapose to it "never hear from again." But Hyla's positioning mirrors (or echoes) Nancy's in its "displacement," albeit with a dramatically different result. Placing the stress on "him" in "I'll never hear from him again" invokes a different relationship to "something else" than did Nancy's primary stress deployment. Instead of complementarity or reciprocity, this one appears to invoke additivity or cumulation, and recency within it—"I won't see him again, just as I haven't seen any of the others again after the first date." If Nancy's inexplicitly conveyed "it goes without saying that he'll like you" is a possible compliment, Hyla's "I'll not hear from him again, like the others" is a possible complaint and self-deprecation, and thereby a possible rejection of her friend's appreciation.<sup>17</sup>

For what it's worth,<sup>18</sup> I report that Hyla, who had been an undergraduate student in one of my courses, came back to visit me some years later. While I was expressing enthusiasm for the richness of the material which she had collected and given to me, I summarized for her various of the episodes which had turned out to be analytically productive, and included this one. As I came to the end of the recounting, her mouth dropped open; it was, she said, as if I had read her diary. There had been a series of "dates" with

young men with no subsequent developments.... and so forth. Of course, there is no magic here; she had built it all in to the construction of her talk. Once one uncovers the practices employed to "encode" it (as it is sometimes put), it can be relatively straightforward though not necessarily simple—to decode it.

So, again to be a bit more explicit: The marked placement of the primary stress here also invites the hearer to locate the other element or elements related to the item which has been stressed, and to find the relationship which relates them and which is being invoked. Here, as in Nancy's utterance, the items to be retrieved are unspoken but invoked—or evoked — from the recipient's presumed knowledge. Solving the relationship between the stressed talk and what it is paired with is a job which the teller imposes on the hearer. To "get" the point you must find the paired referent and solve the relationship (contrastive, additive, etc.); and if you claim to have gotten the point, you will have solved the puzzle. Hyla sums up the theme of this sequence (at lines 30-31) as "a conspiracy against me" a conspiracy, of course, involving the aggregate actions of a number of participants. Nancy, virtually simultaneously, has been prompted—(by "never hear from him again," her grasp of which she is displaying)—Nancy has been prompted to ask whether Hyla "got the mail today," which turns out to be an allusive way of asking whether a letter has yet arrived from another, already-being-pined-for, "him" that Hyla has not heard from. Thus does Nancy show that, and how, she has solved Hyla's utterance and its marked shift of primary stress, a solution which converges with the mock-paranoid upshot simultaneously articulated by Hyla.

Limited though it may be to one particular way in which prosody can be implicated in the production of action (but see Appendix II), I would like to ground and constrain some reflections on the working of prosody in forming up action in conversation by reference to this episode and the analysis which I have proposed.

## Prosody and action formation: A few more general reflections

Several sorts of analytic resources are needed to come to terms with prosody in conversation and other talk-in-interaction and its contribution to action formation in particular.

<sup>17</sup> It should be noted, however, that other understandings of the stress placement in Nancy's turn are possible — for example, that Nancy too is invoking cumulation (e.g., "and then you'll like him" — just like the others you have recently liked). (My thanks to Cecilia Ford for suggesting this possibility.) In that case, something other than complimenting might be being implemented (perhaps possible teasing), and Hyla's turn may be a direct continuation of Nancy's line, rather than an offset to it. Although I find the reading offered in the text more telling, I do not (yet) see how the data provide a decisive resolution. The analysis of Hyla's turn, on the other hand, can be more directly grounded in the participants' own displayed understandings in the indigenous sequel in the interaction. The analytic relevance of the usage "possible X" is underscored here, for the possibility of Nancy's turn as "compliment" can be entertained and pursued once one has an account of the practice which provides for it, even if it should turn out that that was not the analysis accorded it by its recipient on this occasion.

<sup>&</sup>lt;sup>18</sup> I should say that it is not worth much to me, analytically speaking, however gratifying it may have been personally; the payoff is in the analysis of the repeatably inspectable data, not in the personal testimony of the participants in the interaction, whose remarks are contributions to another occasion of talk-in-interaction, and subject to *its* contingencies. But some workers in this area do weigh such evidence more heavily, and I include it for whatever anecdotal value it may have for such colleagues.

*The prosody*. First, we need a descriptive and analytic apparatus for the prosody itself which is as sensitive and responsive to the parameters of interactional organization as it is to acoustic, phonetic, phonological, and other traditional constraints on description. However important a role they have played and continue to play in research on prosody, I doubt that pitch tracks and other such instrumentational resources will by themselves suffice for inquiry into the prosody of conduct in interaction. A characterization of the prosody of a bit of talk-in-interaction by its acoustic properties alone is unlikely to give us what about that acoustic configuration was relevant to its deployment at just that juncture in the talk (and why), and was relevant to the understanding and response which the talk thus prosodically "packaged" elicited from interlocutors.<sup>19</sup>

One aspect of the interest in instrumental representations of prosody may well be the past restriction to print of our media of publication, and the need to have a more intersubjective representation of prosody than discursive description provides. But this does not constitute instrumental representations — and their exclusive reliance on the physical description of sound — as analytically authoritative or indispensable. One alternative to, or complement for, instrumentally based description may be found in modalities of research publication which provide for accustic access to the phenomena being treated; hence the effort in this paper to provide access to the digitized sound of the interactional episodes being subjected to analysis.

But the challenge here goes beyond adequate means of communication between investigators. It concerns the proper targets of our ground level representations and accounts of prosody, and thereby our very grasp of what constitutes prosodic phenomena.

On the one side, work grounded in conversational materials as the home base has begun to contribute a shopping list of potential relevancies in candidate prosodic phenomena and demonstrations of their consequentiality, although that community is not the strongest repository of the technical skills and knowledge relevant to some of the most basic tasks (but cf. Kelly & Local, 1989a, 1989b). Some work pursued under these or related auspices may be found among the papers in collections such as Auer and di Luzio (1992), Couper-Kuhlen and Selting (1996), and Ochs, Schegloff, and Thompson (1996). It seems likely that the further development of this work will involve accounts of vocal practices—breathing, articulation, melody, amplitude, pace, pitch contour, etc.— of a sort as yet unfamiliar, and the distribution of those practices over the components of the carrier utterance, whose anatomy or armature for this purpose will themselves require detailed technical analysis (and not only taxonomic characterization) in conversation-structural terms. Here, as elsewhere, then, adequate treatment will require attention both to the composition of the prosody and to its positioning over its carrier.

On the other side, work grounded in traditional and more recent studies of prosody not particularly focused on conversation has itself been the site of intensive work, building on such past work as that of Bolinger (1986, 1989) and Ladd (1979, 1980). Represented

<sup>&</sup>lt;sup>19</sup> For example, a low-high contour ("question-intonation") at other than possible turn completion has a transparent usage and understanding (as a "try-marker") if applied to a term of person reference (such as a name) which can invite recipient recognition of who is being referred to (a "recognitional reference form," Sacks & Schegloff, 1979; Schegloff, 1996d, p.460), but can be opaque in its import with other sorts of turn elements.

most recently in efforts such as Ladd's (1997) *Intonational Phonology* and by work on the TOBI system for prosodic description (Silverman et al., 1992; Pitrelli, Beckman, & Hirschberg, 1994), it remains to be seen what relationship this line of work will bear to that anchored in the organization of conversation as the context for treating prosody.

*The Action.* Second, we need an account of the practices for achieving certain actions—so to speak the other side of the equation, if we are trying to explicate how prosody with certain properties produces an understood action of a certain sort (Schegloff, 1996b). We need, that is, a theory of action—or, more precisely, analytically explicit accounts of actions.

It might appear that linguists interested in this area should be developing the descriptive apparatus for prosody, while sociologists or anthropologists develop accounts of actions. But it seems to me critical that the division of labor not be drawn that way, at least not exclusively. For these jobs to be convergently relevant to interaction, they must be undertaken by people sensitive to, trained in, or at least interested in, the organization of interaction and the implementation of action within it, as well as in the constitution and deployment of the resources of prosody.

Although the 1992 Pennsylvania IRCS Workshop on Prosody in Natural Speech in Philadelphia (Institute for Research in Cognitive Science, 1992) was certainly an important step in the right direction, with persons professionally trained in the analysis of prosody getting together to talk about what prosody does in interaction among other settings, we should hope for more integration in the future. In particular, we should hope for the participation of persons trained in the *analysis of talk and other conduct in interaction*. This area of inquiry must take seriously the possibility that the analysis of action in interaction is an undertaking as technical as the analysis of prosody, and perhaps even more complicated (though not in the sense of instrumentation). The rigor of our attention to *action* should not be less than that of our attention to *prosody*. For this enterprise, people trained in the analysis of interaction, and action in interaction, are as relevant as those trained in the analysis of intonation. For this to be a really serious undertaking, it will require persons with training in both.

*The Operations.* And third, we will need certain mediating operations — ones indigenous to categories of action and realizable by practices of prosody. These operations may allow us to make analytically explicit the connection between prosody of a certain sort and action of a certain type, because the prosody embodies or implements a certain operation (such as "contrast" or "recency within cumulation"), and that operation (in context) is part of a practice for doing some action — such as opposing, or alluding, and whatever action that allusion could be doing.

The issue here is very much like one posed by the sort of analysis of cross-talk carried through by John Gumperz and his associates (e.g., Gumperz, 1982 inter alia), whose work on incorporating prosody into the study of spoken discourse has been among the most prominent in the contemporary scene. In this work, as is well known, certain features of Indian or Pakistani English are taken systematically to engender culturally and linguistically grounded misunderstandings and stereotypes. But, however recognizable the features of the dialect in question may be, and however distressingly apparent the misunderstandings and their consequences, it remains quite unclear why those particular features of dialect (or divergences of dialect) and their prosodic realization should produce those particular misunderstandings or stereotypes. We lack the intervening mechanism which takes that input and yields that outcome.

What is at issue is rather like the relationship between epidemiology and cellular biology in the understanding of the linkage of smoking and lung cancer. Epidemiological studies may show in a statistically compelling way (to all but some in the tobacco industry) the connection between smoking and lung cancer, but we need cellular and molecular biology to specify what it is about the smoking that engenders the cancers — what the mechanism is that takes the one as input and yields the other as outcome. It was the lack of a decisive solution on that front that for many years allowed the tobacco industry representatives their refuge. The lack of a solution on that front in the relation of prosody and action can leave us with profound analytical ambiguities and equivocalities as well. The need for such a specification of the operation of prosody is not, then, specific to Gumperz' effort to explain cultural misunderstandings by reference to prosodic interference in cross talk. It is a general requirement for analytic progress in this area.

# CONCLUDING COMMENTS

For the understanding of talk-in-interaction, prosody taken by itself will supply no panaccas. Prosody always has a carrier, and the carrier — some spate of talk or other vocalization (or its relevant absence) — will be implicated somehow in the range of organizations by which humans organize occasions of interacting together. The parties to the interaction will have deployed the prosody of their talk so as to contribute to bringing off some undertaking or project in that talk, or to bringing off the talk as an undertaking in its own right. They do so with the resources which the organization of talk-in-interaction mobilizes for their disposal, and within its constraints. So to contribute to our understanding, prosody must be understood, as they say, "in context."

This "in context" theme which is invoked so often has become such an orthodoxy that it threatens to become virtually vacuous and nothing but a pledge of analytic allegiance, unless it is given substantive and empirical specification. Among the contexts I think will be relevant to the analysis of prosody are ones proximately constitutive of the occasion of the spoken discourse, and for talk-in-interaction these are, most directly, (1) the organization of the turn and the turn-constructional unit, perhaps through the "intonation unit" or "tone unit" which various of our colleagues have been working to develop as an analytic resource; (2) the practices of action formation; (3) the organization of sequences through which trajectories of action and stance are accomplished; and (4) the organization of occasions of talk-in-interaction have turned out to be relevant to the episodes examined here, by reference to which the particular bits of prosody on which we have focused need to be understood.

What then is to be taken away from the discussion of these particulars?

- 1. A pitch peak can project upcoming possible *turn* completion at the next possible grammatical completion of the unit currently being produced.
- 2. Evidence that this is the case can be developed for single instances of such pitch peaks:
  - (a) the pitch peak is followed by turn completion;
  - (b) the pitch peak is followed at next grammatical completion by the start of another's turn, whether or not prior speaker has stopped talking; that is, recipients hear the peak as projecting completion;

- (c) where the pitch peak is not followed by that speaker coming to completion, the continuing talk is marked by practices (talking faster, louder, etc.) oriented to the possibility that a recipient may try to start talking at next possible completion;
- (d) such observables show that a pitch peak may be understood as oriented to projecting upcoming completion, and is consequential in this respect, even when that is not the realized outcome, and this needs to inform the interpretation of frequency distributions and other forms of quantitative analyses.
- 3. It is expectable that other prosodic features of talk-in-interaction will be best understood by reference to contingencies of turn design and turn-taking organization (and sequence organization; cf. Footnote 2). Analysts armed with a technical understanding of how these organizations work will be better prepared to hear what particular prosodic features and practices might be about.
- 4. Prosodic features and practices may be implicated not in the constitution of the underlying substrate for talk per sebut in the realization of particular actions, displays, stances, and so forth within that talk. Because this domain is especially vulnerable to researchers' lively intuitions grounded in the vernacular or common-sense culture of their society rather than in disciplined inquiry, analysis along such lines should be grounded in explicit accounts of the prosody involved, explicit analysis and justification of the characterization proposed for the action being realized, and specification of the operation or mechanism which links that prosody to that interactional outcome.
- 5. Some prosodic practices get their import specifically from how they relate to those of others. Prosodic values calibrated to those of the interlocutor—whether conforming or resistant to those of the other—can constitute an arena in which stances can be embodied, confirmed, adjusted, worked through, and so forth, whether toward one another or toward some target of mutual orientation. The "negotiation of pitch level" examined earlier is but one instance of such interaction carried through virtually exclusively through prosody. Its analysis turns on a grasp of the interactional issues being worked out through prosodic means.

Undertaking and implementing the incorporation of prosody into the analysis of talk-in-interaction faces, it seems to me, some great temptations and a daunting challenge.

The great temptations are, on the one hand, to let our intuitions carry the day and plug them into analysis ex cathedra, by stipulation, promiscuously, as it were, without the disipline of analytic explication, and, on the other hand, to abandon our intuitions in favor of instrumentation, whether mechanical, electronic, or digitized, as if the merely acoustical properties of the speech signal are what does the work.

The challenge, finally, is to steer between this Scylla and Charybdis. Between unexplicated intuition and undomesticated instrumentation we may yet develop empirically grounded analyses of the deployment of the music in talk-in-interaction.

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# APPENDIX I

### **Transcript symbols**

(Adapted from Ochs, Schegloff, & Thompson, 1996, pp.461-465)

- 1. Temporal and sequential relationships
  - A. Overlapping or simultaneous talk is indicated in a variety of ways.
- [ Separate left square brackets, one above the other on two successive lines with
- [ utterances by different speakers, indicates a point of overlap onset, whether at the start of an utterance or later.
- ] Separate right square brackets, one above the other on two successive lines with
- ] utterances by different speakers indicates a point at which two overlapping utterances both end, where one ends while the other continues, or simultaneous moments in overlaps which continue.

So, in the following, Bee's "Uh really?" overlaps Ava's talk starting at "a" and ending at the "t" of "tough."

Ava: <u>I</u> 'av [a lotta t]ough cou:rses. Bee: [Uh really?]

= B. Equal signs ordinarily come in pairs — one at the end of a line and another at the start of the next line or one shortly thereafter. They are used to indicate two things:

(1) If the two lines connected by the equal signs are by the same speaker, then there was *a single, continuous utterance* with no break or pause, which was broken up in order to accomodate the placement of overlapping talk. For example, in the following extract,

Bee: In the gy:m? [(hh) Ava: [Yea:h. Like grou(h)p therapy. Yuh know [half the grou]p thet we had la:s' term wz there en= Bee:  $[O \quad h : : : . ]$ 'hh

Ava: = [we jus' playing arou:nd.

Bee: =['hh

Ava's talk is continuous, but room has been made for Bee's overlapping talk (the "Oh").

(2) If the lines connected by two equal signs are by different speakers, then the second followed the first with no discernable silence between them, or was *"latched"* to it.

(0.5) C. Numbers in parentheses indicate *silence*, represented in tenths of a second; what is given here in the left margin indicates 5/10s of silence. Silences may be marked either within an utterance or between utterances, as in the two excerpts below:

- Bee: 'hhh <u>Uh:</u>; (0.3) I don'know I guess she's aw-she's aw<u>r</u>ight she went to thee uh:: hhospital again tihda:y,
- Bee: Tch! .hh So uh I don't kno:w, Bee: En:= (0.3)
- (.) D. A dot in parentheses indicates a "*micropause*," hearable but not readily measurable without instrumentation; ordinarily less than 2/10s in duration.
- 2. Aspects of speech delivery, including aspects of intonation
  - A. The punctuation marks are not used grammatically, but to indicate intonation.
  - The period indicates a *falling, or final, intonation contour*, not necessarily the end
- ? of a sentence. Similarly, a question mark indicates rising intonation, not necessarily
- , a question, and a comma indicates "continuing" intonation, not necessarily a clause
- ¿ boundary. The inverted question mark (¿) is used to indicate a rise stronger than a comma but weaker than a question mark.
- :: B. Colons are used to *indicate the prolongation or stretching of the sound* just *preceding* them. The more colons, the longer the stretching. On the other hand, graphically stretching a word on the page by inserting blank spaces between the letters does *not* necessarily indicate how it was pronounced; it is used to allow alignment with overlapping talk. Thus,
  - Bee: Tch! (M'n)/(En) they can't delay much lo:nguh they [jus' wannid] uh-`hhh=
  - Ava: [O h : . ]
  - Bee: = yihknow have anothuh consulta:tion,
  - Ava: Ri::ght.
  - Bee: En then deci::de

The word "ri::ght" in Ava's second turn, or "deci::de" in Bee's third are more stretched than "oh:" in Ava's first turn, even though "oh:" appears to occupy more space. But "oh" has only one colon, and the others have two; "oh:" has been spaced out so that its brackets will align with the talk in Bee's ("jus' wannid") turn with which it is in overlap.

- C. A hyphen after a word or part of a word indicates a *cut-off or self-interruption*, often done with a glottal or dental stop.
- word D. Underlining is used to indicate *some form of stress or emphasis*, either by increased loudness or higher pitch. The more underlining, the greater the emphasis.
- word Therefore, underlining sometimes is placed under the first letter or two of a word, rather than under the letters which are actually raised in pitch or volume. Especially loud talk
- WOrd may be indicated by upper case; again, the louder, the more letters in upper case. And in extreme cases, upper case may be underlined.
- \* E. The degree sign indicates that the talk following it was *markedly quiet or soft*.
- When there are two degree signs, the talk beween them is markedly softer than the talk around it.

F. Combinations of underlining and colons are used to indicate intonation contours, as follows:

- \_: If the letter(s) preceding a colon is underlined, then there is an "*inflected*" falling *intonation contour* on the vowel (you can hear the pitch turn downward).
- : If a colon is itself underlined, then there is an *inflected rising intonation contour* on the vowel (i.e., you can hear the pitch turn upward).

So, in

Bee: In the gy:m? [(hh)

Ava: [Yea:h. Like grou(h)p <u>ther</u>apy. Yuh know [half the grou]p thet we had la:s' term wz there en=

Bee: [O h::::.]'hh

- Ava: =[we jus' playing arou:nd.
- Bee: =['hh
- Bee: Uh-fo[oling around.
- Ava: ['hhh
- Ava: Eh-yeah so, some a' the guys who were <u>be</u>dder y'know wen' off by themselves so it wz <u>two</u> girls against this one guy en he's <u>ta</u>:ll. Y'know? ['hh

Bee: [Mm hm?

the "Oh::::" in Bee's second turn has an upward inflection while it is being stretched (even though it ends with falling intonation, as indicated by the period). On the other hand, "<u>ta</u>:ll" at the end of Ava's last turn is inflected downward ("bends downward," so to speak) over and above its "period intonation."

- ↑ G. The up and down arrows mark *sharper rises or falls in pitch* than would be indicated by combinations of colons and underlining, or may mark a whole shift, or resetting, of the pitch register at which the talk is being produced.
- >< H. The combination of "more than" and "less than" symbols indicates that the talk between them is *compressed or rushed*.
- <> Used in the reverse order, they can indicate that a stretch of talk is markedly *slowed* or *drawn out*.
- < The "less than" symbol by itself indicates that the immediately following talk is "*jump-started*," that is, sounds like it starts with a rush.
- hhh I. *Hearable aspiration* is shown where it occurs in the talk by the letter "h"—the more h's, the more aspiration. The aspiration may represent breathing, laughter, etc.
- (hh) If it occurs inside the boundaries of a word, it may be enclosed in parentheses in order to set it apart from the sounds of the word.
- <sup>1</sup>hh If the aspiration is an *inhalation*, it is shown with a dot before it (usually a raised dot). Aspiration symbols appear in the passage quoted earlier on this page.
- 3. Other markings
- (()) A. Double parentheses are used to mark transcriber's descriptions of events, rather than representations of them. Thus ((cough)), ((sniff)), ((telephone rings)), ((footsteps)), ((whispered)), ((pause)) and the like.

- (word) B. When all or part of an utterance is in parentheses, or the speaker identification is, this indicates *uncertainty on the transcriber's part*, but represents a likely possibility.
- () Empty parentheses indicate that something is being said, but *no hearing* (*or*, in some cases, *speaker identification*) can be achieved.
- (try 1)/ C. In some transcript excerpts, two parentheses may be printed, separated by a
- (try 2) single oblique or slash; these represent alternative hearings of the same strip of talk.

Bee: °(Bu::t.)=/°(Goo:d.)=

Here, the degree marks show that the utterance is very soft. The transcript remains indeterminate between "Bu::t." and "Goo:d." Each is in parentheses and they are separated by a slash.

The core of this set of notational conventions was first developed by Gail Jefferson. It continues to evolve and adapt both to the work of analysis, the developing skill of transcribers, and changes in technology. Not all symbols have been included here, and some symbols in some data sources are not used systematically or consistently.

# **APPENDIX II**

Although I have restricted myself to single episodes on which to explicate the practices which I discuss, these are by no means unique occurrences. For example, with respect to displaced stress implementing the operation of additivity or cumulation, consider the following exchange, taken from British data. A country Vicar has called the wife of a colleague, herself a woman who had lost a son in a road accident, to ask her to help counsel a local family who had recently suffered a similar tragedy.

(5) H: (S)88(II):2:2:2:14-3:5

01	Ron:	Uh:m Leslie the reas'n why I'm phoning is I'm just wond'ring
02		whether you: might be a hu-a:ble to hhe:lp a f:amily in:
03		u-Nether Stowie ¿ .hhhh who've had urather a tragedy:¿
04		(0.2)
05	Ron:	.t.hhh Uh:m:: (0.2) their youngest son:: was kill:ed on the:
06		Nether Stowie bypass::[:
07	Leslie:	[S <u>o</u> me <u>yea</u> rs ago <u>:</u> ,
08		(0.2)
09	Ron:	Couple a' weeks ag[o.
10	Leslie:	[.t Oh couple of weeks ago thez another
11		one. iYes, .hh[hh
12	Ron:	[.hhh A:n:du-[uh:
13	Leslie: -	$\rightarrow \qquad \qquad [H_{\underline{ow}} \underline{old} \text{ is } \underline{he}:-\underline{was} \text{ he.}$
14		(.)
15	Ron:	.t [ee-S <u>o</u> rry¿

[He w'z jus' twen  $\downarrow$ ty.

- 16 Leslie:  $\rightarrow$  [.hhhhhhh How <u>old was he[</u>:.
- 17 Ron:
- 18 Leslie: .m.t O<u>h</u> $\downarrow$ :.h

When presented with an unidentified family, Leslie appears to try to guess whom the Vicar has in mind, and tries to confirm the supposition by a guess at when the accident occurred (line 07). With the Vicar's correction of the time, Leslie understands that she had been thinking of the wrong person, and that the Vicar is calling about yet another young accident victim, the third after her own child and the one she thought he was speaking of (line 10). Note then that her inquiry about the age of this person (as effectively asked at line 16) deploys the stress not only where one might have expected, "How old was he:," but also (and with greater stress) displaced to the right, "How old was he:," a practice which I understand to implement the operation of underscoring the incremented addition to the cumulation about whom she is inquiring. Note as well, that Leslie persists in achieving this outcome. Having initially (at line 13) positioned the stress on "he," she realizes that she has used a present tense verb which is no longer appropriate, and the contrastive stress needed for the correction (of "is" by "was") supercedes the previous stress on "he." The combination (together with the stress on "old") renders uptake of the utterance problematic, and the recipient initiates repair (at line 15), a repair in which the original, displaced stress is reproduced, indeed is upgraded. I take the displacement of stress here to "he" to be the cognate of Hyla's displacement of stress in "I'll never hear from him again." (Note, however, that the stress on "was" (line 13) is used to mark a contrast, not an increment to a cumulation. So in line 13, the two stresses are quite different in the order of organization at which they operate—one implementing an intra-turn contrast which is correction oriented, the other implementing a cross-turn cumulation. This is part of what was meant earlier by the observation that some prosody is *in* a turn but not of it.)